

### **ABSTRACT OF THE DISCLOSURE**

The present invention discloses a diagonal testing method for flash memories. The testing method regards the flash memory as several squares, and executes in the direction from top to bottom and from left to right. Each square is provided with a first diagonal in -45 degrees from the upper left to the lower right, and a second diagonal in +45 degrees from the lower left to the upper right. The present invention is to program the cells in the first diagonal or the second diagonal, and then read the cells except the first diagonal or the second diagonal; or, program the cells except the first diagonal or the second diagonal, and then read the cells in the first diagonal or the second diagonal so as to detect the disturb fault in the flash memories and normal memory fault models.